

The Kid's Times:

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Loggerhead Sea Turtle



Johan Chevalier

Loggerhead sea turtles have very large heads compared to their bodies.

Sea turtles are graceful saltwater reptiles, well adapted to life in their marine world. With streamlined bodies and flipper-like limbs, they are graceful swimmers able to navigate across the oceans. When they are active, sea turtles must swim to the ocean surface to breathe every few minutes. When they are resting, they can remain underwater for much longer periods of time.

How did the loggerhead get its name?

The loggerhead sea turtle is named for its exceptionally large head.

What do they look like?

The adult loggerhead has a reddish-brown **carapace** and a yellow **plastron**. They have large heads with powerful jaws. An adult loggerhead weighs 170 to 500 pounds and is up to 45 inches long.

Hatchlings have light to dark gray/brown shells. Their flippers are dark brown with white edges and their belly is a faded yellow.

When loggerheads first hatch, they are less than 2 inches long.

Where do they live?

Loggerheads are found worldwide primarily in **subtropical** and **temperate** ocean waters. Many turtles live in nearshore waters, coastal bays and **estuaries**, but can travel out into open ocean. Small juveniles will spend from 7 to 12 years traveling oceanic waters before returning to nearshore waters.

The loggerhead is the most common sea turtle in southeastern U. S. They nest along the Atlantic coast of Florida, South Carolina, Georgia, and North Carolina and along the coast of the Gulf of Mexico. The east coast of Florida is one of the two most important places in the world for loggerhead nesting.

How long do they live?

Scientists believe that they are long lived and could live to 50 years or more.



Marco Giuliano

Loggerheads eat invertebrates they find on the ocean floor.



Alan F. Rees, ARCHELON

Man is a predator of the Loggerhead sea turtle.

What do they eat?

Loggerheads are **carnivores**, meaning they eat mostly other animals. The hatchlings feed on small animals living in the sea grasses called **sargassum**, where they spend their early developmental years. Juveniles and adults eat mostly bottom dwelling invertebrates such as whelks, other mollusks, horseshoe crabs, and sea urchins. Their powerful jaws are designed to crush their prey.

When and where do female loggerheads lay their eggs?

Female loggerheads reach maturity at about 35 years of age. Every 2-3 years they mate in coastal waters and then return to nest on the **natal beach**. They emerge onto the beach at night every 14 days laying an average of 4 **clutches** of 100 - 126 eggs. The nesting season begins in April and ends in September.

Once a female loggerhead has emerged onto the nesting beach, she will clear away the dry sand with her front flippers and then dig an egg chamber with her rear flippers. She then deposits her eggs into the nest chamber. The eggs are **pliable** and white and are the size of ping-pong balls.

How does temperature affect loggerhead eggs?

The eggs incubate for approximately 60 days before hatching. This incubation period can be longer in areas where temperatures are cooler. Temperature also plays a role in determining the gender of the hatchlings. A cooler nest (below 82°F) will produce more males. A warmer nest (above 85°F) will produce more females. A nest between the two temperatures will produce approximately equal amounts of both males and females.

What happens when the loggerhead eggs hatch?

After emerging from their shells, the hatchlings work together to push the sand and shells down to the bottom of the nest chamber and then wait just beneath the surface of the sand for the cooler temperatures of night. When they emerge, they crawl down the beach toward the brightest horizon, which on a natural beach is always toward the sea. Artificial lights confuse hatchlings, and they will head toward the lights of houses, parking lots or roads instead where they often die.



Felix Nowak

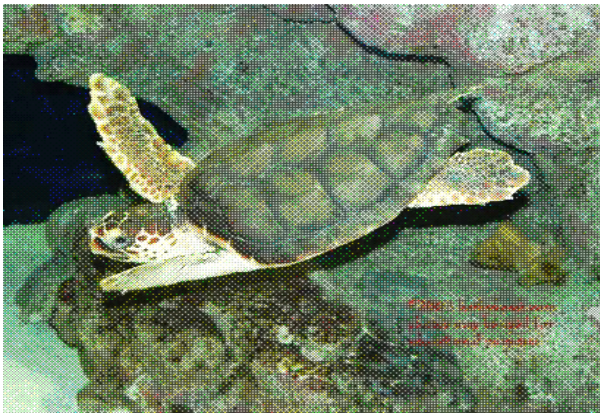
Loggerheads live in nearshore, often shallow, waters.

Loggerhead hatchlings spend the first 6-12 years of their lives floating in the open ocean, living in or near sargassum before returning to

shallower coastal waters. This period was called the "lost years" because scientists did not know where the turtles were. Researchers have been able to learn more about their early development.

Who are their predators?

Raccoons and wild pigs often dig up nests after they have been laid and eat or destroy the eggs. Hatchlings are subject to predation by ghost crabs and raccoons on the beach, and birds, reef fish, and sharks in the water. They soon become too big for most of these predators, but sharks will prey on loggerheads throughout their lives. Their flippers are especially vulnerable. Man is another predator of the loggerhead turtle.



Kathy Boast

Sea turtles use their front flippers to pull through the water like humans.

How many are there?

As with other sea turtles, the best way that scientists have to monitor the status of the population is to count the number of nests that are laid. In Florida from 1989-2003, 39,000-60,000 nests were documented each year on beaches that were monitored.

However, in recent years, nesting is declining on these important U.S. nesting beaches and serious declines have been measured in the Pacific.

Why are they in trouble?

Loggerhead turtles have long been hunted for their eggs and for leather. Today in the U.S. this is no longer legal, but some hunting continues. Loggerheads also become entangled or drown in shrimp trawls and other fishing gear. Pollution and marine debris are another threat to sea turtles in the water. In coastal areas where there are many boats, sea turtles are frequently injured and killed by collisions with boats and propellers. On nesting beaches threats to loggerheads are coastal development, coastal armoring, and beachfront lighting, which leads to the loss of beach habitat for nesting.

What is being done to help them?

The loggerhead sea turtle was listed under the Endangered Species Act (ESA) as threatened in 1978. The National Marine Fisheries Service is responsible for sea turtles in their marine habitats, while the U.S. Fish and Wildlife Service has jurisdiction over their nesting beaches. Both agencies work to protect sea turtles through the ESA. The U.S. also works closely with other nations where sea turtles are found, to ensure that turtles are protected throughout their **range**.

Many researchers are learning more about the life history of sea turtles and this will enable those charged with protecting sea turtles to do a better job of ensuring that they recover. An example of a specific regulation that has helped to protect loggerheads and other sea turtles is the requirement that shrimp trawls use a Turtle Excluder Device (TED) to allow sea turtles to escape from the trawl when they are caught.

What can you do to help sea turtle?

It is possible for anyone to help support sea turtle conservation. You can help participate

in beach cleanups or attend a public sea turtle walk. You can do a presentation on turtles for a class to raise awareness, adopt a turtle, or follow a sea turtle telemetry project. You can help just by remembering not to release balloons or throw trash into the ocean. You can also help spread the word to your family and friends that sea turtles are an important part of the environment and should be protected.

Glossary:

Carapace: Top shell of a turtle

Carnivore: An animal that eats meat

Clutch: A group of turtle eggs in the nest

Estuary: An inlet or arm of the sea where the tide meets the current

Hatchling: A turtle just emerged from the egg

Natal beach: Beach where turtle is born

Plastron: Bottom shell of a turtle

Pliable: Easy to bend; flexible

Range: Entire area where a species can be found

Sargassum: Brown, floating seaweed

Subtropical: The area of the world bordering the Tropics, which is the area around the equator between the Tropic of Capricorn and the Tropic of Cancer



Barbara Schroeder

Female sea turtles come onto land at their natal beach to lay their eggs.

Temperate: Not very hot, nor very cold; the area of the world between the Tropics and the polar circles



NOAA's National Marine Fisheries Service
Office of Protected Resources

www.nmfs.noaa.gov/pr/

Molly Harrison 2005